#### **BEFORE**

# THE PUBLIC SERVICE COMMISSION OF

# **SOUTH CAROLINA**

DOCKET NOS. 2021-89-E and 2021-90-E - ORDER NO. 2022-330

MAY 5, 2022

IN RE:	Docket No. 2021-89-E – Duke Energy	)	ORDER REGARDING
	Carolinas, LLC's 2021 Avoided Cost	)	AVOIDED COST
	Proceeding Pursuant to S.C. Code Ann.	)	METHODOLOGIES,
	Section 58-41-20(A)	)	STANDARD OFFERS,
		)	FORM CONTRACTS,
	and	)	AND COMMITMENT TO
		)	SELL FORMS
	Docket No. 2021-90-E – Duke Energy	)	
	Progress, LLC's 2021 Avoided Cost	)	
	Proceeding Pursuant to S.C. Code Ann.	)	
	Section 58-41-20(A)	)	

#### I. INTRODUCTION

Pursuant to S.C. Code Ann. § 58-41-20(A) and Order No. 2021-257, Duke Energy Carolinas, LLC (DEC) and Duke Energy Progress, LLC (DEP), (collectively Duke Companies), jointly filed an application with the Public Service Commission of South Carolina (Commission) on April 22, 2021, seeking approval from the Commission for their avoided cost methodologies, agreements, and forms as mandated by Section 58-41-20 of the South Carolina Code of Laws (Supp. 2021).

The Joint Application filed by the Duke Companies requested Commission approval for the following items:

<sup>&</sup>lt;sup>1</sup> Commission Order No. 2021-257 set the procedural schedule in Docket Nos. 2021-89-E and 2021-90-E establishining the deadlines for filing the application, prefiled testimony and exhibits, and the first day of the hearing.

- (1) Application of the peaker methodology currently used by DEC and DEP to calculate avoided cost rates;
- (2) Standard Offer, as defined in S.C. Code Ann. § 58-41-10(15), which includes DEC's and DEP's respective updated Schedule PP (SC) Purchased Power tariffs (Standard Offer Tariff or Schedule PP), Terms and Conditions for the Purchase of Electric Power (Standard Offer Terms and Conditions, or Terms and Conditions), and Standard Offer Power Purchase Agreement (Standard Offer PPA) available to all qualifying co-generators and small power production facilities (QFs) up to 2 megawatts (MW) in size;
- (3) Power Purchase Agreement available to small power producer Qualifying Facilities (QFs or QF) that are not eligible for the Standard Offer (Large QF PPA) and DEC's and DEP's respective updated Schedule PP-LQF (SC) Purchased Power tariffs available to small power producer QFs that are not eligible for the Standard Offer (Large QF Tariff); and
  - (4) Notice of Commitment to sell form (Notice of Commitment Form).

On July 23, 2021, prior to the scheduled hearing, a Stipulation of Agreement (Stipulation) entered into among the Duke Companies; the South Carolina Office of Regulatory Staff (ORS); Carolinas Clean Energy Business Association (CCEBA); and South Carolina Coastal Conservation League (SCCCL) and Southern Alliance for Clean Energy (SACE) (collectively, the Stipulating Parties) was filed with the Commission. All parties of record are signatories to the Stipulation but for the South Carolina Department of Consumer Affairs (SCDCA) and Johnson Development Associates, Inc. (JDA) who

each informed the Commission in writing that it did not object to the Stipulation.<sup>2</sup> We approve and adopt the Stipulation in this proceeding. We find the Stipulation reflects a balanced resolution of the issues presented in this proceeding that is consistent with PURPA, just and reasonable to DEC's and DEP's ratepayers, in the public interest, and nondiscriminatory to small power producers. We find and conclude that the Stipulation meets the requirements of South Carolina Code Section 58-41-20.

# II. PROCEDURAL HISTORY

This Docket began with the Commission establishing a procedural schedule on March 10, 2021, for DEC's and DEP's avoided cost proceedings, requiring the Application to be filed by April 19, 2021, and establishing a hearing date of August 2, 2021. DEC and DEP sought relief from the Application deadline due to an ongoing independent technical review, and the Commission heard oral arguments to address the Duke Companies' request. On April 14, 2021, the Commission denied the request and adopted another procedural schedule requiring submission of the Application by April 22, 2021, and establishing that the hearing would take place the "[w]eek of August 2, 2021." <sup>4</sup>

On March 31, 2021, the Commission determined it would issue a Request for Proposal for a consultant in the Docket.<sup>5</sup> The first Request for Proposal was filed on April 19, 2021, establishing a deadline for submissions by May 3, 2021. A second Request for Proposal was ordered on May 19, 2021, with a submission deadline of June 3, 2021. A

<sup>&</sup>lt;sup>2</sup> South Carolina Department of Consumer Affairs' Letter, dated October 15, 2021, and Johnson Development Associates, Inc.'s Letter, dated July 27, 2021.

<sup>&</sup>lt;sup>3</sup> Order No. 2021-166.

<sup>&</sup>lt;sup>4</sup> Order No. 2021-257.

<sup>&</sup>lt;sup>5</sup> Order No. 2021-231.

third Request for Proposal was filed on June 16, 2021, with a submission deadline of July 13, 2021. Thereafter, on July 14, 2021, the Commission's Clerk's Office indicated in a filing that three companies submitted proposals to serve as an independent consultant.

On April 22, 2021, DEC and DEP filed a joint application and exhibits. The Commission Clerk's Office issued a notice of the filing, the hearing date, and prefiled testimony deadlines. By letter dated May 4, 2021, the Clerk's Office of the Commission transmitted the Notice of Filing and Hearing and Prefile Testimony Deadlines (Notice)<sup>6</sup> in the above-referenced Dockets to DEC and DEP. The Notice indicated the nature of the proceeding and advised all parties desiring participation in the scheduled proceeding of the manner and time by which to file appropriate pleadings.

On May 17, 2021, the Duke Companies filed the direct testimony and exhibits of Witnesses Glen A. Snider and David B. Johnson. The Duke Companies' Joint Application and prefiled testimony requested approval of: (1) the continued application of the peaker methodology to calculate avoided cost rates; (2) the Duke Companies' updated Standard Offer (including Schedule PP, Terms and Conditions, and Standard Offer PPA); (3) the Duke Companies' updated Large QF PPA; and (4) the Duke Companies' updated Notice of Commitment Form.

<sup>&</sup>lt;sup>6</sup> The Commission subsequently issued a Revised Notice on June 16, 2021, confirming the evidentiary hearing would be conducted virtually.

<sup>&</sup>lt;sup>7</sup> The Commission granted confidential treatment of Snider DEC Exhibit 1 and Snider DEP Exhibit 1 in Order No. 2021-71-H. On June 16, 2021, the Duke Companies filed Johnson Amended DEC/DEP Exhibit 9 to correct illegible information

On June 11, 2021, DEC and DEP filed affidavits demonstrating that the Notice was duly published and furnished to small power producers in accordance with the instructions set forth in the May 4, 2021, letter.

In addition to ORS, as a statutorily authorized party<sup>8</sup>, the following entities each filed petitions to intervene in this docket, which were granted by the Commission without objection:JDA, CCEBA, SCDCA,<sup>9</sup> SCCCL andSACE, and the Hydropower Petitioners (Pelzer Hydro Company, LLC, Aquenergy Systems, LLC, and Northbrook Carolina Hydro, LLC). The Hydropower Petitioners later asked to withdraw their intervention, which the Commission granted on July 30, 2021.

On May 26, 2021, the Commission issued Order No. 2021-386(A) consolidating the DEC and DEP dockets for hearing.

On June 11, 2021, ORS filed the direct testimony of Witnesses Gretchen C. Pool and Brian Horii, with exhibits included with the direct testimony of Witness Horii.

On July 14, 2021, DEC and DEP petitioned for a declaratory order asking for a ruling "that clarifies that it is permissible for [DEC's and DEP's] attorneys to consult with their witnesses privately and confidentially during the period between the direct and rebuttal testimony of those witnesses." The Commission denied the request in Order No. 2021-524.

On July 23, 2021, DEC and DEP filed a Stipulation of Agreement, entered into by, CCEBA, DEC, DEP, SACE, SCCCL, and ORS, which purported to resolve all outstanding

<sup>8</sup> S.C. Code Ann. § 58-4-10 (2015).

<sup>&</sup>lt;sup>9</sup> The SCDCA was notified of this proceeding by the Clerk of the Commission pursuant to S.C. Code Ann. § 37-6-604(C) and it then submitted a petition to intervene.

issues in the Docket. As part of the Stipulation, the Stipulating Parties agreed to stipulate into the record the prefiled direct and stipulation testimony and exhibits of DEC/DEP Witnesses Snider and Johnson, and the prefiled direct testimony and exhibits of ORS Witness Horii and the prefiled direct testimony of ORS Witness Pool without objection or cross examination by the Stipulating Parties. On July 29, 2021, and as referenced in the Stipulation, DEC and DEP filed an amended solar integration services charges agreement.

Pursuant to S.C. Code Ann. §58-41-20(I) the Commission selected London Economics International LLC (London Economics) as the independent third-party consultant to advise and report to the Commission on the Duke Companies' avoided costs. On July 29, 2021, in Order No. 2021-529, the Commission adopted the scope of work and schedule for London Economics. The Order established the consultant's report would be due on August 23, 2021, <sup>10</sup> and after a period for discovery, the consultant would offer testimony and be available for cross examination and Commissioners' questions at a reconvened hearing on September 16 and 17, 2021. <sup>11</sup> London Economics filed its fifty-five (55) page Report on August 23, 2021. <sup>12</sup> This Report included a review of the Stipulation nt between the parties.

By motion filed on July 30, 2021, ORS moved to present the direct testimony of its witnesses, not at the August 2, 2021 hearing, but at the reconvened phase of the hearing on September 16 and 17, 2021, "because the findings of London Economics will not be known or subject to review by the parties [at the time of the first phase of the hearing] . . . and

<sup>&</sup>lt;sup>10</sup> The Report of the Independent Third-party Consultant, London Economics, is Hearing Exhibit No. 7 (LEI Report).

<sup>&</sup>lt;sup>11</sup> Order Nos. 2021-520 and 2021-527.

<sup>&</sup>lt;sup>12</sup> Hearing Exhibit No. 7 (LEI Report).

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"ORS's witnesses will not be able to comment or opine on the London Economics report at the [reconvened, second phase of the hearing]."<sup>13</sup>

In Order No. 2021-527, the Commission amended its previous order for the parties to respond to the consultant's testimony by allowing them to "provide responsive testimony and/or exhibits to the [c]onsultant's report after the [c]onsultant is questioned at the September 16-17, 2021[] hearing." The deadline for any prefiled testimony from the parties in response to the [c]onsultant's testimony was scheduled to be filed no later than noon on September 15, 2021.

The Commission convened a virtual evidentiary hearing on this matter on August 2, 2021 with the Honorable Justin T. Williams presiding at the hearing. The Duke Companies were represented by Frank R. Ellerbe, III, Esquire, and E. Brett Breitschwerdt, Esquire. ORS was represented by Andrew M. Bateman, Esquire, and Benjamin P. Mustian, Esquire. SCDCA was represented by Roger P. Hall, Esquire. CCEBA was represented by Richard L. Whitt, Esquire. SACE and SCCCL were represented by Katherine Lee Mixson, Esquire, and Emma C. Clancy, Esquire. Johnson Development Associates, Inc. was represented by Weston Adams, III, Esquire, and Courtney E. Walsh, Esquire.

DEC/DEP Witness Snider testified and provided a summary of his prefiled direct and stipulation testimony. Witness Snider supports the use of the peaker methodology for the calculation of avoided cost and the adjustment to DEC's seasonal allocation of capacity

<sup>&</sup>lt;sup>13</sup> ORS' Motion for Leave to Present Its Witnesses at the Hearing Scheduled for September 16-17, 2021 and For Expedited Consideration, dated July 30, 2021, pp. 4-5.

<sup>&</sup>lt;sup>14</sup> Order No. 2021-527.

<sup>&</sup>lt;sup>15</sup> Mr. Breitschwerdt was granted admission pro hac vice in Order No. 2021-486.

value presented by ORS Witness Horii and as agreed to in the Stipulation. DEC/DEP Witness Johnson also testified in support of the non-rate terms and conditions of the Duke Companies' documents used for contracting with QFs as detailed in his prefiled direct and stipulation testimony.

ORS Witnesses Pool and Horii also testified and provided summaries of their prefiled direct testimonies. Witness Pool provided the results of ORS's examination of DEC and DEP and its review of the Duke Companies' filing in this docket. Witness Horii testified about his analyses, review, and recommendations regarding the Duke Companies' standard offers, avoided cost methodologies, form power purchase agreements, and commitment to sell forms.

The Commission reconvened the hearing on September 16, 2021. At this time, Jonathan Goulding of London Economics presented testimony regarding the review, analysis, and conclusions found in London Economics' Report issued and filed with the Commission on August 23, 2021.<sup>16</sup>

## III. APPLICABLE LAW

The federal government "specifically intended to promote the production of renewable energy from sources such as solar" with the enactment of the Public Utility Regulatory Policies Act (PURPA).<sup>17</sup> "PURPA requires that electric utilities offer to purchase renewable energy from qualifying facilities."<sup>18</sup> Pursuant to PURPA, "the PSC may not set the rates for renewable energy higher than the combination of expenses and

<sup>&</sup>lt;sup>16</sup> Hearing Exhibit No. 7 (LEI Report).

<sup>&</sup>lt;sup>17</sup> S.C. Coastal Conservation League v. Dominion Energy S.C., Inc., 432 S.C. 217, 220, 851 S.E.2d 699, 700 (2020).

<sup>&</sup>lt;sup>18</sup> Id.

capital costs the utility would incur if it produced the electricity itself, or if it purchased the electricity from another provider."<sup>19</sup>

When the South Carolina legislature enacted Act 62 (the South Carolina Energy Freedom Act), effective May 16, 2019, including Section 58-41-20 of the South Carolina Code of Laws, the Commission was directed to review the avoided cost rates of electrical utilities in a separate proceeding from the annual fuel cost proceedings established in Section 58-27-865 of the South Carolina Code (2015).<sup>20</sup>

The Commission now has the express authority and a legislative mandate to establish, in a separate docket, the avoided cost methodologies, form contracts, and power purchase agreement notice of commitment forms used by DEC and DEP every two years. Section 58-41-20(A) provides that following the initial avoided cost proceeding there shall be a biennial review and approval process<sup>21</sup>:

. . . at least once every twenty-four months thereafter, the commission shall approve each electrical utility's standard offer, avoided cost methodologies, form contract power purchase agreements, commitment to sell forms, and any other terms or conditions necessary to implement this section. Within such proceeding the commission shall approve one or more standard form power purchase agreements for use for qualifying small power production facilities not eligible for the standard offer. Such power purchase agreements shall contain provisions, including, but not limited to, provisions for force majeure, indemnification, choice of venue, and confidentiality provisions and other such terms, but shall not be determinative of price or length of the power purchase agreement. The commission may

<sup>20</sup> Id. at 221, 851 S.E.2d at 701.

<sup>&</sup>lt;sup>19</sup> *Id*.

<sup>&</sup>lt;sup>21</sup> The current proceeding is the second joint avoided cost proceeding for the Duke Companies in South Carolina. The first or initial avoided cost Order following enactment of Act 62 was issued by the Commission on December 20, 2019 and amended on January 2, 2020 in Docket Nos. 2019-185-E and 2019-186-E following the Commission's decision on November 15, 2018.

approve multiple form power purchase agreements to accommodate various generation technologies and other project-specific characteristics. This provision shall not restrict the right of parties to enter into power purchase agreements with terms that differ from commission-approved form(s). Any decisions by the commission shall be just and reasonable to the ratepayers of the electrical utility, in the public interest, consistent with PURPA and the Federal Energy Regulatory Commission's implementing regulations and orders, and nondiscriminatory to small power producers; and shall strive to reduce the risk placed on the using and consuming public.<sup>22</sup>

This biennial review is necessary for the Commission to administer PURPA implementation in South Carolina. The Commission reviews and approves not only each utilities' specific Standard Offer, but also the Commission reviews and approves the Form PPAs for QFs not eligible for the Standard Offer and the Notice of Commitment to Sell Forms which are used by small power producer QFs as part of the State's PURPA implementation framework.<sup>23</sup> The Commission is further directed to "treat small power producers on a fair and equal footing with electrical utility-owned resources by ensuring that: "the purchased power rates "accurately reflect the electrical utility's avoided costs," the power purchase agreements used "are commercially reasonable and consistent with [FERC] regulations implementing PURPA;"and the avoided cost methodology "fairly accounts for costs avoided by the electrical utility or incurred by the electrical utility."<sup>24</sup> Moreover, the Commission "shall approve a standard notice of commitment to sell form"<sup>25</sup> for use by small power producers eligible for the standard offer, and require "the avoided

<sup>&</sup>lt;sup>22</sup> S.C. Code Ann. § 58-41-20(A) (Supp. 2021).

<sup>&</sup>lt;sup>23</sup> S.C. Code Ann. §58-41-20(A), (C), & (D) (Supp. 2021).

<sup>&</sup>lt;sup>24</sup> S.C. Code Ann. § 58-41-20 (B) (Supp. 2021).

<sup>&</sup>lt;sup>25</sup> S.C. Code Ann. § 58-41-20 (D) (Supp. 2021).

cost rates offered by an electrical utility to a small power producer not eligible for the standard offer must be calculated based on the avoided cost methodology most recently approved by the commission."<sup>26</sup> The Commission may employ the services of an independent expert to evaluate the calculations and terms of the matters subject to the proceeding and report the results of that evaluation to the Commission.<sup>27</sup>

South Carolina's PURPA implementation must be "consistent with PURPA and the Federal Energy Regulatory Commission's implementing regulations and orders," and section 58-41-20 of the South Carolina Code of Laws expressly requires the Commission's determination of the rates for purchase from QFs to be "just and reasonable to the ratepayers of the electrical utility, in the public interest . . . and nondiscriminatory to small power producers." Additionally, the Commission's implementation of PURPA in South Carolina "shall strive to reduce the risk placed on the using and consuming public." The risk of PURPA implementation exists for electrical utility customers, in part, because customers are responsible for paying the cost of all power purchased from QFs through the annual fuel factor.

The statutorily mandated purpose of this case is for the Commission to update and set avoided cost rates for qualifying facilities selling their output to the Duke Companies pursuant to PURPA and to approve contract terms to govern those sales of power, consistent with PURPA and Act 62. The Commission is specifically instructed by law to

<sup>&</sup>lt;sup>26</sup> S.C. Code Ann. § 58-41-20 (C)(Supp. 2021).

<sup>&</sup>lt;sup>27</sup> S.C. Code Ann. § 58-41-20 (I) (Supp. 2021).

<sup>&</sup>lt;sup>28</sup> S.C. Code Ann. § 58-41-20 (A) (Supp. 2021).

<sup>&</sup>lt;sup>29</sup> See generally S.C. Code Ann. § 58-41-20(A) (Supp. 2021).

<sup>30</sup> Id

<sup>&</sup>lt;sup>31</sup> S.C. Code Ann. § 58-27-865 (Supp. 2021).

"treat small power producers on a fair and equal footing with electrical utility--owned resources." With regard to small power producers, the Commission must ensure that:

- (1) rates for the purchase of energy and capacity fully and accurately reflect the electrical utility's avoided costs;
- (2) power purchase agreements, including terms and conditions, are commercially reasonable and consistent with regulations and orders promulgated by the Federal Energy Regulatory Commission implementing PURPA; and
- (3) each electrical utility's avoided cost methodology fairly accounts for costs avoided by the electrical utility or incurred by the electrical utility, including, but not limited to, energy, capacity, and ancillary services provided by or consumed by small power producers including those utilizing energy storage equipment. Avoided cost methodologies approved by the commission may account for differences in costs avoided based on the geographic location and resource type of a small power producer's qualifying small power production facility.<sup>33</sup>

With larger QFs not eligible for the Standard Offer, the avoided cost rates offered by an electrical utility must be calculated based on the avoided cost methodology most recently approved by the Commission.<sup>34</sup>

Section 58-41-20 (F)(1) requires:

Electrical utilities, subject to approval of the commission, shall offer to enter into fixed price power purchase agreements with small power producers for the purchase of energy and capacity at avoided cost, with commercially reasonable terms and a duration of ten years. The commission may also approve commercially reasonable fixed price power purchase agreements with a duration longer than ten years, which must contain additional terms, conditions, and/or rate structures as proposed by intervening parties and approved by the commission, including, but not

<sup>&</sup>lt;sup>32</sup> S.C. Code Ann. § 58-41-20(B) (Supp. 2021).

 $<sup>^{33}</sup>$  *Id*.

<sup>&</sup>lt;sup>34</sup> S.C. Code Ann. § 58-41-20(C) (Supp. 2021).

limited to, a reduction in the contract price relative to the ten year avoided cost.<sup>35</sup>

Pursuant to Sections 201 and 210 of PURPA, electrical utilities are required to interconnect with and offer to purchase electric energy from qualifying cogeneration and small power production facilities or QFs.<sup>36</sup> This is known as the "mandatory purchase obligation" under PURPA.<sup>37</sup> PURPA requires the rates that electrical utilities pay to purchase QF energy shall not exceed the purchasing electrical utility's "avoided costs," which PURPA defines as the incremental cost to the electrical utility of the electric energy, which, but for the purchase from such QFs, such utility would generate or purchase from another source.<sup>38</sup> PURPA also requires that the rates for purchases of QF power be set at levels and in a manner that is just and reasonable to the utility's customers, in the public interest, and nondiscriminatory towards QFs.<sup>39</sup>

In enacting PURPA, Congress directed FERC to prescribe regulations to encourage the development of cogeneration and small power production facilities under PURPA and delegated to state commissions the responsibility of implementing FERC's regulations, including PURPA's mandatory purchase obligation.<sup>40</sup> In 1980, FERC issued its rulemaking order, Order No. 69, establishing regulations to implement PURPA.<sup>41</sup> In 2020, FERC issued Order No. 872, updating the avoided cost rate provisions of its regulations to

<sup>&</sup>lt;sup>35</sup> S.C. Code Ann. § 58-41-20(F)(1) (Supp. 2021).

<sup>&</sup>lt;sup>36</sup> See 16 U.S.C. § 824a-3(a).

<sup>&</sup>lt;sup>37</sup> See generally Implementation Issues Under the Public Utility Regulatory Policies Act of 1978, 168 FERC ¶ 61,184 at ¶76 (Sept. 19, 2019) ("PURPA NOPR") (noting that PURPA's mandatory purchase requirements are a benefit of QF certification).

<sup>&</sup>lt;sup>38</sup> See 16 U.S.C. § 824a-3(b), (d).

<sup>&</sup>lt;sup>39</sup> See 16 U.S.C. § 824a-3(b)(1); (2).

<sup>&</sup>lt;sup>40</sup> See 16 U.S.C. § 824a-3(f); see also FERC v. Mississippi, 456 U.S. 742,750-51, 102 S.Ct. 2126 (1982).

<sup>&</sup>lt;sup>41</sup> See Final Rule Regarding the Implementation of Section 210 of the Public Utility Regulatory Policies Act of 1978, Order No. 69, FERC Stats. & Regs. ¶ 30,128, (1980) ("Order No. 69").

ensure that its implementing regulations continue to meet the requirements of sections 201 and 210 of PURPA to both encourage QFs while protecting electric consumers.<sup>42</sup>

Effective on December 31, 2020, Section 292.304(d) and (e) of Title 18, Code of Federal Regulations, states:

- (d) Purchases "as available" or pursuant to a legally enforceable obligation.
- (1) Each qualifying facility shall have the option either:
- (i) To provide energy as the qualifying facility determines such energy to be available for such purchases, in which case the rates for such purchases shall be based on the electric utility's avoided cost for energy calculated at the time of delivery; or
- (ii) To provide energy or capacity pursuant to a legally enforceable obligation for the delivery of energy or capacity over a specified term, in which case the rates for such purchases shall, except as provided in paragraph (d)(2) of this section, be based on either:
  - (A) The avoided costs calculated at the time of delivery; or
  - (B) The avoided costs calculated at the time the obligation is incurred.
- (iii) The rate for delivery of energy calculated at the time the obligation is incurred may be based on estimates of the present value of the stream of revenue flows of future locational marginal prices, or Competitive Prices during the anticipated period of delivery.<sup>43</sup>

<sup>&</sup>lt;sup>42</sup> See Qualifying Facility Rates and Requirements Implementation Issues Under the Public Utility Regulatory Policies Act of 1978, Order No. 872, 172 FERC ¶ 61,041, clarified by Order No. 872-A, 173 FERC ¶ 61,158 (2020) ("Order No. 872").

<sup>&</sup>lt;sup>43</sup> 18 CFR § 292.304(d)(1) (Order 69, 45 FR 12234, Feb. 25, 1980, as amended by Order 872, 85 FR 54733, Sept. 2, 2020).

The current law also contains a mechanism by which the Commission may require avoided cost to be calculated from the date of delivery and may vary over the term of the PPA.

(2) Notwithstanding paragraph (d)(1)(ii)(B) of this section, a state regulatory authority or nonregulated electric utility may require that rates for purchases of energy from a qualifying facility pursuant to a legally enforceable obligation vary through the life of the obligation, and be set at the electric utility's avoided cost for energy calculated at the time of delivery.<sup>44</sup>

A qualifying facility still under construction has a prerequisite to "obtaining" a legally enforceable obligation—the new QF must demonstrate commercial viability and financial commitment to construct the facility.

(1) Obtaining a legally enforceable obligation. A qualifying facility must demonstrate commercial viability and financial commitment to construct its facility pursuant to criteria determined by the state regulatory authority or nonregulated electric utility as a prerequisite to a qualifying facility obtaining a legally enforceable obligation. Such criteria must be objective and reasonable.<sup>45</sup>

The factors affecting rates as set forth in section 294.304(e)<sup>46</sup> have also changed in the current law, effective on December 31, 2020:

- (e) Factors affecting rates for purchases.
  - (1) A state regulatory authority or nonregulated electric utility may establish rates for purchases of energy from a qualifying facility based on a purchasing

<sup>&</sup>lt;sup>44</sup> 18 CFR § 292.304(d)(2) (Order 69, 45 FR 12234, Feb. 25, 1980, as amended by Order 872, 85 FR 54733, Sept. 2, 2020).

<sup>&</sup>lt;sup>45</sup> 18 CFR § 292.304(d)(3) (Order 69, 45 FR 12234, Feb. 25, 1980, as amended by Order 872, 85 FR 54733, Sept. 2, 2020).

<sup>46 18</sup> CFR § 294.304(e).

electric utility's locational marginal price calculated by the applicable market defined in § 292.309(e), (f), or (g), or the purchasing electric utility's applicable Competitive Price. Alternatively, a state regulatory authority or nonregulated electric utility may establish rates for purchases of energy and/or capacity from a qualifying facility based on a Competitive Solicitation Price. To the extent that capacity rates are not set pursuant to this section, capacity rates shall be set pursuant to subsection (2).

- (2) To the extent that a state regulatory authority or nonregulated electric utility does not set energy and/or capacity rates pursuant to paragraph (e)(1) of this section, the following factors shall, to the extent practicable, be taken into account in determining rates for purchases from a qualifying facility:
- (i) The data provided pursuant to § 292.302(b), (c), or (d), including State review of any such data;
- (ii) The availability of capacity or energy from a qualifying facility during the system daily and seasonal peak periods, including:
  - (A) The ability of the electric utility to dispatch the qualifying facility;
  - (B) The expected or demonstrated reliability of the qualifying facility;
  - (C) The terms of any contract or other legally enforceable obligation, including the duration of the obligation, termination notice requirement and sanctions for non-compliance;
  - (D) The extent to which scheduled outages of the qualifying facility can be usefully coordinated with scheduled outages of the electric utility's facilities;
  - (E) The usefulness of energy and capacity supplied from a qualifying facility during system emergencies, including its ability to separate its load from its generation;

- (F) The individual and aggregate value of energy and capacity from qualifying facilities on the electric utility's system; and
- (G) The smaller capacity increments and the shorter lead times available with additions of capacity from qualifying facilities; and
- (iii) The relationship of the availability of energy or capacity from the qualifying facility as derived in paragraph (e)(2)(ii) of this section, to the ability of the electric utility to avoid costs, including the deferral of capacity additions and the reduction of fossil fuel use; and
- (iv) The costs or savings resulting from variations in line losses from those that would have existed in the absence of purchases from a qualifying facility, if the purchasing electric utility generated an equivalent amount of energy itself or purchased an equivalent amount of electric energy or capacity.<sup>47</sup>

## IV. DISCUSSION OF THE EVIDENCE OF RECORD

#### a. Peaker Methodology

Witness Snider supervises the Integrated Resource Plan (IRP) production for both DEC and DEP, and his responsibilities include the methodology used by the Duke Companies to determine avoided costs and the analytic functions related to preparing the IRPs of the companies.<sup>48</sup> Snider explained the peaker methodology used by DEC and DEP to calculate avoided costs as follows:

This approach assumes that when a utility's generating system is operating at equilibrium, the installed fixed capacity cost of a simple-cycle combustion turbine ("CT")

<sup>&</sup>lt;sup>47</sup> 18 CFR § 292.304(e) (Order 69, 45 FR 12234, Feb. 25, 1980, as amended by Order 872, 85 FR 54733, Sept. 2, 2020).

<sup>&</sup>lt;sup>48</sup> Tr. Vol. 1, pp. 40.2, 40.5.

generating unit (a "peaker")[,] plus the variable marginal energy cost of running the system[,] will produce a reasonable proxy for the marginal capacity and energy costs that a utility avoids by purchasing power from a QF. 49

DEC/DEP Witness Glen Snider advocated for Commission approval of the Duke Companies' continued use of the peaker methodology to forecast and quantify the Duke Companies' avoided capacity and energy costs.<sup>50</sup> He explained that the peaker methodology assumes that when a utility's generating system is operating at equilibrium, the installed fixed capacity cost of a simple-cycle combustion turbine (CT) generating unit (a "peaker") plus the variable marginal energy cost of running the system will produce a reasonable proxy for the marginal capacity and energy costs that a utility avoids by purchasing power from a QF.<sup>51</sup> Using this methodology, Witness Snider explained, the peaker methodology ensures, consistent with PURPA, that capacity purchases from new QF generators are not more expensive than the avoided capacity cost of a peaker.<sup>52</sup>

DEC/DEP Witness Snider contends this methodology complies with PURPA because it is "designed to ensure that purchases from new QF generators are not more expensive than the avoided capacity cost of a peaker plus the utility's forecasted avoided system marginal energy cost." Furthermore, Snider contends the Commission should approve the continued use of the peaker methodology by DEC and DEP. In fact, Snider further testified that DEC and DEP continue "to evaluate how to incorporate the new

<sup>&</sup>lt;sup>49</sup> Tr. Vol. 1, p. 40.14, lines 5-10.

<sup>&</sup>lt;sup>50</sup> Tr. Vol. 1, p. 40.13.

<sup>&</sup>lt;sup>51</sup> Tr. Vol. 1, p. 40.14.

<sup>&</sup>lt;sup>52</sup> Tr. Vol. 1, p. 40.14.

<sup>&</sup>lt;sup>53</sup> *Id.*, lines 11-13.

<sup>&</sup>lt;sup>54</sup> Tr. Vol. 1, p. 40.17.

options available under [FERC] Order No. 872, in light of Act 62's prescriptive requirements for PURPA implementation in South Carolina, and may propose changes in accordance with [FERC] Order No. 872 in future PURPA-related proceedings."55

Witness Snider testified that the peaker methodology is a widely used and accepted industry approach to quantifying avoided cost rates paid to QFs.<sup>56</sup> He noted that the National Association of Regulatory Utility Commissioners (NARUC) has recognized the peaker methodology as one of the dominant methodologies for measuring avoided cost under PURPA and that this Commission has consistently accepted the Duke Companies' use of the peaker methodology to quantify DEC's and DEP's forecasted avoided capacity and energy costs.<sup>57</sup> According to Mr. Snider, the peaker methodology provides an appropriate and reasonable estimate of the avoided or incremental costs of alternate capacity and energy that would have otherwise been incurred but for the purchase from a QF facility, thus leaving the consumer indifferent to the utility's purchase of QF generation.<sup>58</sup>

ORS Witness Brian Horii supported the Duke Companies' use of the peaker methodology to calculate their respective avoided costs.<sup>59</sup> He noted that the peaker methodology is a generally accepted method for calculating PURPA avoided energy and capacity costs and that the Commission approved the Duke Companies' use of the methodology in Order No. 2019-881(A).<sup>60</sup> No other intervenor proffered testimony

<sup>&</sup>lt;sup>55</sup> Tr. Vol. 1, p. 40.13, lines 9-12.

<sup>&</sup>lt;sup>56</sup> Tr. Vol. 1, p. 36.

<sup>&</sup>lt;sup>57</sup> Tr. Vol. 1, p 40.16.

<sup>&</sup>lt;sup>58</sup> Tr. Vol. 1, pp. 36, 40.10.

<sup>&</sup>lt;sup>59</sup> Tr. Vol. 1, p. 106.6.

<sup>&</sup>lt;sup>60</sup> Tr. Vol. 1, p. 106.6.

regarding the Duke Companies use of the peaker methodology. As Witness Snider explained, however, the Stipulating Parties support Commission approval of the Duke Companies' avoided cost methodology as reflected in the Stipulation.<sup>61</sup>

The Commission's independent third-party consultant, London Economics, likewise accepted the Duke Companies' continued use of the peaker methodology and acknowledged that it is "commonly used by utilities throughout the country." London Economics Witness Goulding testified that the Duke Companies' proposed avoided cost methodology as agreed to in the Stipulation "fairly accounts for DEC's and DEP's avoided costs." Witness Goulding noted that the methodology has been approved by the Commission and in the Duke Companies' 2019 avoided cost proceeding and that it is "broadly applied across the industry in similar proceedings." For these reasons, London Economics recommends that the Commission approve the Duke Companies' continued use of the peaker methodology to calculate DEC's and DEP's avoided costs.

# b. Avoided Capacity Quantification and Rate Design

The evidence supporting the findings of fact related to avoided capacity quantification and rate design is contained in the Duke Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding.

<sup>&</sup>lt;sup>61</sup> Tr. Vol. 1, p. 44.3.

<sup>&</sup>lt;sup>62</sup> Hearing Exhibit 7 (LEI Report), pp. 12, 50.

<sup>63</sup> Tr. Vol. 2, p10, lines 1-2.

<sup>&</sup>lt;sup>64</sup> Tr. Vol. 2, p. 10, lines 5-6.

<sup>&</sup>lt;sup>65</sup>Tr. Vol 2, p. 10.

DEC/DEP Witness Snider explained that the peaker methodology calculates avoidable marginal capacity by examining the annual fixed cost associated with constructing, financing, and operating a simple cycle combustion turbine ("CT") generating unit (a "peaker"). According to Witness Snider, the Duke Companies used data from EIA as the basis for developing the CT capital cost. Because the EIA data reflects the cost to build a single CT unit at a greenfield site, the Duke Companies' adjusted the EIA data to reflect their practice of building multiple units at each new site. 67

In addition, Witness Snider explained, the Duke Companies avoided capacity calculation takes into account the utility's actual need for capacity based on customer demand. Witness Snider explained that, under PURPA, customers should not be required to pay QFs for avoided capacity unless the QF is actually offsetting a capacity need of the utility. Accordingly, the annual fixed capacity costs used in the avoided cost rate calculation includes the annual fixed capacity costs starting with the first year in which an actual avoidable capacity need exists, as determined by the utilities' IRPs. Prior to the year in which the next avoidable generation unit is needed, the utility does not have a capacity need to avoid, and therefore in the calculation of the capacity rate, no value for avoided capacity is ascribed in these years. Witness Snider explained that if this was not accounted for, customers would be paying a QF for marginal capacity that is providing no actual benefit to serve their needs for capacity. Witness Snider testified that, as described

<sup>&</sup>lt;sup>66</sup> Tr. Vol. 1, p. 37.

<sup>&</sup>lt;sup>67</sup> Tr. Vol. 1, p. 40.18.

<sup>&</sup>lt;sup>68</sup> Tr. Vol. 1, p. 40.22.

<sup>&</sup>lt;sup>69</sup> Tr. Vol. 1, p. 40.20.

<sup>70</sup> *Id* 

<sup>&</sup>lt;sup>71</sup> Tr. Vol. 1, p. 40.20, line 18 – p. 40.21, line 7.

in detail in Chapter 13 of the Duke Companies' respective September 1, 2020 IRPs, filed in Docket Nos. 2019-224-E and 2019-225-E ("2020 IRPs"), DEC's projection of its first avoidable capacity need arises in 2026, while DEP's first avoidable capacity need is 2024.<sup>72</sup> DEC's first year of need (2026) is the same first year of need as identified in the 2019 avoided cost proceeding. Witness Snider explained that this results in an increase to the avoided capacity rates relative to the 2019 proposed avoided capacity rates given that there are two additional years with an ascribed capacity value in the 10-year prospective period captured by the rates.<sup>73</sup> Conversely, DEP's identified first year of need (2024) arises four years later than the first year of need identified in the 2019 avoided cost proceeding, which results in a decrease to the avoided capacity rates relative to the 2019 proposed avoided cost rates.<sup>74</sup> Regardless of first year of need, avoided capacity payments are levelized over the rate term to allow the QF to receive an avoided capacity payment in each year of the contract.<sup>75</sup> Witness Snider testified that the Duke Companies' incorporation of DEC's and DEP's first year of capacity need into their respected avoided capacity rate calculations is fair to customers and fair and non-discriminatory to QFs.<sup>76</sup>

Next, Witness Snider explained that the Duke Companies incorporate seasonal allocation weighting to determine the avoided capacity payments.<sup>77</sup> For DEC and DEP, seasonal allocation is heavily weighted to winter based on the impact of summer versus winter loss of load risk, which has been driven by the volatility in winter peak demand, as

<sup>&</sup>lt;sup>72</sup> *Id*.

<sup>&</sup>lt;sup>73</sup> Tr. Vol. 1, p. 40.21.

<sup>74</sup> Id

<sup>13</sup> Id

<sup>&</sup>lt;sup>76</sup> Id

<sup>&</sup>lt;sup>77</sup> Tr. Vol. 1, p. 40.22.

well as the growing penetration of solar resources and its associated impact on summer versus winter reserves. Witness Snider stated that the Duke Companies developed the seasonal allocation factors, consistent with Order No. 2019-881(A), based on total connected solar generating facilities plus solar facilities with signed PPAs as determined by the Duke Companies' 2018 Solar Capacity Value Study. Using this analysis, DEP's avoided capacity rates pay 100% of the annual capacity value in the winter, while DEC's avoided capacity rates pay 89% in the winter and 11% in the summer period. ORS Witness Horii found that the allocation of 0% capacity cost to the summer season for DEP was reasonable, but recommended, along with ORS Witness Pool, that DEC adjust its seasonal allocation weighting to reflect a 5% summer allocation and 95% winter allocation. According to Witness Horii, this allocation adjustment better reflects DEC's need for capacity in the summer. Witness Snider explained that, as part of the Stipulation, the Stipulating Parties agreed to Witness Horii's recommended seasonal allocation adjustment for calculating DEC's avoided capacity costs in this proceeding.

Overall, ORS Witnesses Horii and Pool found the Duke Companies' estimates of generation capacity cost to be reasonable and consistent with the methodology adopted by the Commission in Order No. 2019-881(A). Witness Horii also specifically found that the updates incorporated into the Duke Companies' inputs were reasonable.<sup>84</sup> No other

<sup>78</sup> Id.

<sup>&</sup>lt;sup>79</sup> Tr. Vol. 1, pp. 40.22, 42.

<sup>&</sup>lt;sup>80</sup> Tr. Vol. 1, p. 40.22.

<sup>&</sup>lt;sup>81</sup> Tr. Vol. 1, p. 105.11.

<sup>82</sup> Id..

<sup>&</sup>lt;sup>83</sup> Tr. Vol. 1, pp. 42, 44.4.

<sup>&</sup>lt;sup>84</sup> Tr. Vol. 1, p. 106.11.

intervenor proffered testimony on the Duke Companies' avoided capacity quantification and rate design. As Witness Snider explained, however, the Stipulating Parties have agreed to support Commission approval of the Duke Companies' avoided capacity rates with the modification to the seasonal allocation of capacity value presented by ORS Witness Horii.85

On behalf of the Commission's independent third-party consultant, London Economics Witness Goulding testified that the Duke Companies' avoided cost methodology, including its avoided capacity calculation and as agreed to in the Stipulation, "fairly accounts for DEC's and DEP's avoided costs" and advocated that the Commission approve the methodology and avoided capacity rates. 86 More specifically, in its Report, London Economics stated that it was appropriate for the Duke Companies to base the first year of capacity needs on the Duke Companies' respective IRPs. London Economics also agreed with the Duke Companies' use of EIA data to quantity the projected capacity value avoided by OF units.87 Witness Goulding additionally noted that London Economics agrees with the stipulated modification to DEC's seasonal allocation as proposed by ORS Witness Horii and adopted by the Stipulating Parties as part of the Stipulation.<sup>88</sup> According to Witness Goulding, the seasonal allocation modification "ensures that capacity costs are allocated in a way that better reflects expected system needs."89

<sup>&</sup>lt;sup>85</sup> Tr. Vol. 1, p. 44.3, lines 11-13.

<sup>&</sup>lt;sup>86</sup> Tr. Vol. 2, p. 10.

<sup>87</sup> Hearing Exhibit 7 (LEI Exhibit), pp. 32-33.

<sup>&</sup>lt;sup>88</sup> Tr. Vol. 2, p. 10.

<sup>&</sup>lt;sup>89</sup> Id.

# c. Performance Adjustment Factor

Recognizing that the utility's avoided fleet resources are occasionally unavailable, Snider testified that the Duke Companies increased the calculated capacity value pursuant to a performance adjustment factor ("PAF") to ensure that the QF is not penalized for experiencing the same level of unavailability typically experienced by the resources it is displacing. Witness Snider explained that the Duke Companies included a 1.07 PAF for DEC and 1.08 for DEP in the avoided capacity calculations to ensure that QFs are treated on fair and equal footing with utility-owned resources. As to the first years an avoided capacity need arises, Snider states: "DEC's projection of its first avoidable capacity need arises in 2026, while DEP's first avoidable capacity need is 2024." However, the QF would receive a capacity payment each year of a contract because the payments are levelized over the term of the agreement. London Economics found the Duke Companies' assumptions regarding the PAF to be reasonable.

We find the 1.07 PAF for DEC and the 1.08 for DEP reasonable.

# d. Avoided Energy Cost Quantification and Rate Design

The evidence supporting the findings of fact related to avoided energy cost quantification and rate design are contained in the Duke Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding.

<sup>&</sup>lt;sup>90</sup> Tr. Vol. 1, p. 40.19, lines 5-21.

<sup>91</sup> Id.

<sup>&</sup>lt;sup>92</sup> Tr. Vol. 1, p. 40.20, lines 18-20.

<sup>&</sup>lt;sup>93</sup> Tr. Vol. 1, p. 40.21, lines 11-20.

<sup>94</sup> Hearing Exhibit Ex. 7 (LEI Report), pp. 32-33

As to the calculation of avoided energy costs, Snider listed a number of factors that impact the rate: "load and energy forecasts, resource mix, unit characteristics, VOM [Variable Operation and Maintenance] costs, environmental emissions costs, reagent costs[,] and fuel costs." He continued: "recent changes in the commodity market price for natural gas represents the most significant change impacting the Companies' avoided costs."

In direct examination, Snider elaborated on one adjustment to its avoided cost calculation raised by ORS Witness Brian Horii. Snider explained:

The companies incorporate a seasonal weighting in their avoided capacity cost calculations to appropriately recognize the season of the year that drives the company's reliability and need for new capacity additions. . . . In developing these seasonal weightings, the company used the 2018 Solar Capacity Value Study. Based on that study, DEC's seasonal allocation is 89 percent winter and 11 percent summer. 97

Snider noted, however, ORS witness Horii recommended DEC's seasonal "allocation should be adjusted to 95 percent winter and 5 percent summer based on results from the DEC 2020 Resource Adequacy Study and to better align with the current levels of solar on the DEC system." Snider asserted the stipulating parties agreed to the adjustment recommended by Horii "for the purposes of calculating DEC's avoided capacity cost rates in this proceeding. 99

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<sup>&</sup>lt;sup>95</sup> Tr. Vol. 1, p. 40.26, lines 12-14.

<sup>&</sup>lt;sup>96</sup> *Id.*, lines 17-18.

<sup>&</sup>lt;sup>97</sup> Tr. Vol. 1, p. 41, line 24 – p. 42, line 13.

<sup>&</sup>lt;sup>98</sup> Tr. Vol. 1, p. 42, lines 15-18.

<sup>&</sup>lt;sup>99</sup> Tr. Vol 1., p. 42, lines 20-22.

Witness Snider explained that the Duke Companies calculate their respective avoided marginal energy rates using two production cost model simulations which are compared to each other to determine the value of QF energy. According to Witness Snider, a production cost model simulates the generation commitment and dispatch of the utility's fleet of generating resources needed to meet the utility's load over the ten-year avoided cost period on an hour-to-hour basis. 101 The first simulation uses the IRP production cost model and current market assumptions to establish the "base case" of the estimated variable production costs over the period. 102 The second simulation is identical to the first but adds a hypothetical 100 MW of no-cost generation to the utility's generating fleet, which is available to the system in every hour of the ten-year period. Witness Snider explained that comparing the hourly production cost associated with the base case relative to the second case with the 100 MW of no-cost generation determines the marginal hourly energy costs that can be avoided over the study period. 104 According to Witness Snider, these marginal avoided costs are then used to calculate the avoided energy rates that leave a customer indifferent between QF purchases and generation provided by the utility. 105

Witness Snider further explained that the marginal energy rate structure differentiates between Summer (June-September), Winter (December-February), and

<sup>&</sup>lt;sup>100</sup> Tr. Vol. 1, p. 40.25.

<sup>&</sup>lt;sup>101</sup> Tr. Vol. 1, p. 40.25.

<sup>&</sup>lt;sup>102</sup> Tr. Vol. 1, p. 40.25.

<sup>&</sup>lt;sup>103</sup> Tr. Vol. 1, p. 40.25.

<sup>&</sup>lt;sup>104</sup> Tr. Vol. 1, p. 40.25.

<sup>&</sup>lt;sup>105</sup> Tr. Vol. 1, p. 40.25.

Shoulder (March–May, October–November) seasons. <sup>106</sup> The Duke Companies adopted minor adjustments to these pricing periods over the periods approved by the Commission in Order No. 2020-315(A). <sup>107</sup> Witness Snider explained that the DEC rate design incorporates ten hourly energy pricing periods, while the DEP rate design reflects nine hourly energy pricing periods, including higher-priced periods, called "premium peak hours" in the Duke Companies' Winter and Summer Seasons. <sup>108</sup> Witness Snider testified that this rate design appropriately compensates QFs for the avoided energy value they create for customers through the incorporation of granular seasonal and hourly rate periods. <sup>109</sup>

On behalf of ORS, Witness Horii testified that the Duke Companies' avoided energy cost calculation methodology conforms with the methodology approved by the Commission in Order No. 2019-881(A). Witness Horii acknowledged that the DEC time of use periods for each season vary slightly from the periods approved by the Commission in Order No. 2019-881(A), but found that these changes "reasonably reflect[] the updated energy cost profile in DEC's service territory." Witness Horii likewise found the time of use periods for DEP to be reasonable and noted that they are identical to the DEP time of use periods approved in Order No. 2019-881(A). In sum, Witness Horii did not recommend any changes to the Duke Companies' avoided energy cost calculations

<sup>&</sup>lt;sup>106</sup> Tr. Vol. 1, p. 40.27.

<sup>&</sup>lt;sup>107</sup> Tr. Vol. 1, p. 40.27.

<sup>&</sup>lt;sup>108</sup> Tr. Vol. 1, p. 40.28.

<sup>&</sup>lt;sup>109</sup> Tr. Vol. 1, p. 40.28.

<sup>&</sup>lt;sup>110</sup> Tr. Vol. 1, p. 106.6.

<sup>&</sup>lt;sup>111</sup> Tr. Vol. 1, p. 106.8.

or resulting rates applicable to the Standard Offer Tariffs. No other intervenor submitted testimony regarding the Duke Companies' avoided energy calculations and rates. As Witness Snider explained, the Stipulating Parties support Commission approval of the Duke Companies' avoided energy methodology and rates as presented in the Stipulation. 113

On behalf of the Commission's independent third-party consultant, London Economics Witness Goulding testified that the Duke Companies avoided cost methodology, including its avoided energy calculation and rates as agreed to in the Stipulation, "fairly accounts for DEC's and DEP's avoided costs" and advocated that the Commission approve the methodology and avoided energy rates. He More specifically, in its Independent Report, London Economics stated that the Duke Companies' "methodology and resulting avoided energy rates are reasonable." The Independent Report noted that London Economics "agrees with the use of production cost modeling, and allocation of avoided costs based on value according to expected periods of peak hours and seasons." In sum, London Economics found that the Duke Companies' avoided energy rates "accurately reflect DEC and DEP's avoided costs" and recommended that the Commission approve the Duke Companies' avoided energy calculation and resulting rates consistent with the Stipulation.

<sup>&</sup>lt;sup>112</sup> Tr. Vol. 1, p. 106.9.

<sup>&</sup>lt;sup>113</sup> Tr. Vol. 1, p. 44.3.

<sup>&</sup>lt;sup>114</sup> Tr. Vol. 2, p. 10.

<sup>115</sup> Hearing Exhibit 7 (LEI Report), p. 36.

<sup>116 11</sup> 

<sup>117</sup> Hearing Exhibit 7 (LEI Report), p. 50.

# e. Solar Integration Services Charges

The evidence supporting the findings of fact and conclusions related to SISC are contained in the Duke Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding.

The Duke Companies' Application identified that Commission Order No. 2019-881(A) had approved Solar Integration Services Charges ("SISC") of \$1.10/MWh for DEC and \$2.39/MWh for DEP based on existing and committed solar capacity in DEP (2,950 MW) and DEC (840 MW) across each utility's respective system at the time the 2018 Solar Ancillary Service Study was completed. The Duke Companies explained that the difference in the DEP and DEC SISC cost is largely driven by the significantly greater amount of existing and committed future solar capacity in DEP compared to DEC. The Duke Companies further explained that the independent technical review of the methodology and inputs of the 2018 Solar Ancillary Service Study was still underway but was not complete at the time of filing the Application. The Duke Companies explained that they were working with parties to the prior 2019 SISC Settlement to propose an amendment to the 2019 SISC Settlement for the Commission's approval, which will provide flexibility regarding the timing of filing the results of the technical review and the updated SISC. Therefore, the Duke Companies proposed to continue charging the SISCs for DEC and DEP approved in the 2019 avoided cost proceeding pending completion of the independent technical review and future updates to the SISC.

On July 29, 2021, the parties to the 2019 SISC Settlement filed an amended partial settlement agreement in this proceeding for informational purposes, which, in pertinent

part, provided that the current SISCs would continue in effect for avoided cost rates proposed in the current proceeding pending completion of the independent technical review and filing of updated SISCs with the Commission. The Duke Companies agreed in the amended partial settlement agreement to file the updated SISCs no earlier than February 1, 2022 and no later than August 1, 2022.

ORS Witness Horii testified that ORS agreed with Duke's recommendation to hold the SISC at current levels pending completion of the independent technical review.<sup>118</sup> London Economics' Report noted the SISCs were proposed to remain unchanged pending completion of independent technical review and that DEC and DEP had committed to file updated SISCs with the Commission on or before August 1, 2022.<sup>119</sup>

# f. Standard Offer Documents: Tariffs, PPAs, and Terms and Conditions

The evidence supporting these findings of fact and conclusions related to the Standard Offer Documents (e.g., tariffs, PPAs, and Terms and Conditions) are contained in the Duke Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding.

The Duke Companies request Commission approval of DEC's and DEP's updated Standard Offer contracting documents, which include the Duke Companies' respective Standard Offer Tariffs, Standard Offer PPAs, and Terms and Conditions. As DEC/DEP Witness Johnson explained, these documents memorialize the contractual relationship between the Duke Companies and smaller QFs up to 2 MW selling power to the Duke

<sup>&</sup>lt;sup>118</sup> Tr. Vol. 1, p. 104, lines 16-20.

<sup>119</sup> Hearing Exhibit 7 (LEI Report), p. 16.

<sup>&</sup>lt;sup>120</sup> Tr. Vol. 1, p. 83.7.

Companies under the Standard Offer. The Commission most recently approved the Duke Companies' Standard Offer contracting documents in Order No. 2019-881(A), and, as Witness Johnson explained, the Standard Offer contracting documents proffered for Commission approval in this proceeding are largely the same documents approved by the Commission in the 2019 avoided cost proceeding in Order Nos. 2019-818(A) and 2020-315(A).<sup>121</sup>

Standard Offer Tariffs (Schedule PP)

As Witness Johnson described, the Standard Offer Tariff sets forth the Duke Companies' avoided cost rates and contract terms available to Standard Offer QFs desiring to sell energy and capacity to DEC and DEP under PURPA. 122 In particular, the Duke Companies' respective Standard Offer Tariffs state the avoided cost rates and rate structure applicable to the purchase and sets forth other provisions including, but not limited to, the Seller or Administrative Charge, power factor-related charges and adjustments, monthly fees associated with interconnection facilities, and the Solar Integration Services Charge. 123 The Duke Companies' Standard Offer Tariffs provide eligible QFs with variable, 5-year, and 10-year fixed-term options. 124

Aside from changes to the proposed avoided cost rates addressed by Witness Glen Snider, Witness Johnson testified that the Duke Companies have included several

<sup>&</sup>lt;sup>121</sup> Tr. Vol. 1, p. 83.5.

<sup>&</sup>lt;sup>122</sup> Tr. Vol. 1, p. 83.7.

<sup>&</sup>lt;sup>124</sup> Hearing Exhibit 2.

ministerial corrections to the Standard Offer Tariffs to improve clarity, but have not proposed any substantive changes to the Standard Offer Tariffs.<sup>125</sup>

Witness Johnson testified that the Duke Companies' Standard Offer Tariffs comply with the requirements of Act 62 because they address energy, capacity, and ancillary services, among other factors relevant to the purchase of electricity based upon a fair and accurate assessment of DEC's and DEP's future avoided costs.<sup>126</sup>

Standard Offer PPA and Standard Offer Terms and Conditions

As Witness Johnson explained, the Standard Offer PPA is the pro forma PPA that DEC and DEP use to contract with smaller QFs eligible for the Standard Offer for the purchase of energy and capacity under PURPA.<sup>127</sup> The Terms and Conditions are incorporated into DEC's and DEP's Standard Offer PPA by reference and set forth the contractual obligations of both the QF and the Duke Companies as necessary to administer Schedule PP and the Standard Offer PPA in a fair and consistent manner.<sup>128</sup>

Witness Johnson also explained that the Duke Companies have not proposed any substantive modifications to the Standard Offer PPAs and Terms and Conditions in this proceeding. Instead, the only revisions to these documents are the designations in the headers and footers. Witness Johnson testified that the Duke Companies' Standard Offer PPAs and Terms and Conditions comply with the requirements of Act 62 because they

<sup>&</sup>lt;sup>125</sup> Tr. Vol. 1, p. 83.9.

<sup>&</sup>lt;sup>126</sup> Tr. Vol. 1, p. 83.8.

<sup>&</sup>lt;sup>127</sup> Tr. Vol. 1, p. 83.9.

<sup>&</sup>lt;sup>128</sup> Tr. Vol. 1, p. 83.11.

<sup>&</sup>lt;sup>129</sup> Tr. Vol. 1, pp. 83.10, 83.12.

offer eligible QFs a term duration of ten years and set forth terms that are both consistent with FERC regulations and commercially reasonable. 130

ORS, Intervenor, and London Economics Review

On behalf of ORS, Witness Horii testified that ORS reviewed the Duke Companies' proposed modifications to the Standard Offer Tariffs, Standard Offer PPAs, and Terms and Conditions. Witness Horii found that the "very minimal changes" to the Standard Offer Tariffs were "reasonable and non-discriminatory to QFs" and agreed with Witness Johnson that the proposed revisions to the Standard Offer PPAs and Terms and Conditions" were "predominantly 'housekeeping' changes." According to Witness Horii, the proposed modifications to all three sets of documents "remain consistent with or contain slight improvements to those approved by the Commission in Order No. 2019-881(A)." For these reasons, Witness Horii stated that ORS does not object to the Duke Companies' proposed changes to the Standard Offer Tariffs, the Standard Offer PPAs, or the Standard Offer Terms and Conditions. Aside from ORS, no other party proffered testimony regarding these documents.

In Stipulation testimony, Witness Johnson explained that the Stipulating Parties agree with the proposed minor revisions and jointly recommend the Commission approve the Standard Offer Tariffs, Standard Offer PPAs, and Terms and Conditions.<sup>133</sup>

Representing the Commission's independent third-party consultant, London Economics, Witness Goulding agreed with Witness Johnson's characterization of the

<sup>&</sup>lt;sup>130</sup> Tr. Vol. 1, p. 83.10.

<sup>&</sup>lt;sup>131</sup> Tr. Vol. 1, p. 106.17.

<sup>&</sup>lt;sup>132</sup> Tr. Vol. 1, p. 106.17.

<sup>&</sup>lt;sup>133</sup> Tr. Vol. 1, p. 87.4.

Standard Offer Tariffs, Standard Offer PPAs, and Terms and Conditions as documents that are largely unchanged from the ones approved by the Commission in the 2019 avoided cost proceeding.<sup>134</sup> Describing the limited revisions as "administrative updates," the London Economics Report found the Duke Companies' Standard Offer documents to be "commercially reasonable and consistent with PURPA" and recommended that the Commission approve the documents consistent with its 2019 Orders.<sup>135</sup>

DEC and DEP Witness Johnson discussed the standard offer used for "QFs whose renewable facilities are 2 megawatts ("MW") and smaller."<sup>136</sup> He contends the standard offer agreements comply with Act 62 and Commission's Order Nos. 2019-881(A) and 2020-315(A).<sup>137</sup> Johnson indicates the only changes to the PPAs proposed in this docket from those previously approved are "the designations in the header and footer of the documents."<sup>138</sup> He notes there are only header and footer changes to the previously approved standard offer terms and conditions for compliance with Commission Orders No. 2019-881(A) and 2020-315(A).<sup>139</sup>

# g. Large QFs PPA

The evidence supporting the findings of fact and conclusions of law related to Large QFs PPA are contained in the Duke Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding.

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<sup>&</sup>lt;sup>134</sup> Hearing Exhibit 7 (LEI Report), p. 15.

<sup>&</sup>lt;sup>135</sup> *Id.*, p. 39.

<sup>&</sup>lt;sup>136</sup> Tr. Vol 1, p. 83.6, lines 18-19.

<sup>&</sup>lt;sup>137</sup> Tr. Vol. 1, p. 83.9, lines 4-5; p. 83.10.

<sup>&</sup>lt;sup>138</sup> Tr. Vol 1, p. 83.10, lines 17-18.

<sup>&</sup>lt;sup>139</sup> Tr. Vol. 1, p. 83.12.

DEC and DEP offered the testimony and exhibits of David B. Johnson, Director of Business Development and Compliance for Duke Energy Corporation. Johnson's role includes negotiating, executing, and managing power purchase agreements with qualifying facilities. Johnson testified, the Large QF PPA is the standard form PPA that the Duke Companies propose to use to contract with small power producer QFs greater than 2 MW in size and not eligible for the Standard Offer that commit to sell and deliver energy and capacity to the Duke Companies. Witness Johnson explained that Act 62 directs that such PPAs should not be determinative of the avoided cost price and length (or "term") of the power purchase agreement, but requires utilities form PPAs to contain a variety of commercial terms and conditions, including, but not limited to, provisions addressing force majeure, indemnification, choice of venue, and confidentiality. According to Witness Johnson, each of the contractual provisions required by Act 62 are included in the Duke Companies' Large QF PPA.

Witness Johnson also testified that the Duke Companies' Large QF PPA is commercially reasonable as required by Act 62, and complies with applicable FERC regulations. As to the PPAs DEC and DEP use with large qualifying facilities, Johnson asserts Act 62 requires the agreement contain "provisions addressing force majeure, indemnification, choice of venue, and confidentiality," but "does not specify any predetermined price or contract term provisions in the PPA." Johnson further notes PPAs

<sup>&</sup>lt;sup>142</sup> Tr. Vol. 1, p. 83.13.

<sup>&</sup>lt;sup>143</sup> Tr. Vol. 1, p. 83.14.

<sup>&</sup>lt;sup>144</sup> Tr. Vol. 1, 83.14.

<sup>&</sup>lt;sup>145</sup> Tr. Vol 1, p. 83.13, lines 8-9; lines 14-15.

with large QFs must "strive to reduce the risk placed upon the using and consuming public," and be "commercially reasonable." <sup>146</sup>

Witness Johnson explained that the Duke Companies have made limited modifications to the Large QF PPA to "incorporate certain accommodations that have been requested by QFs engaged in the contracting process using this document over the past 18 months."147 Specifically, the Duke Companies (1) revised the definition of "change of control" to exclude transfers completed in connection with tax equity financing transaction where the seller retains operational control of the OF;<sup>148</sup> (2) modified certain representations and warranties relating to "eligible commercial entity" and "eligible contract participant" to allow QF sellers additional flexibility regarding representations as to the expected commercial operation date, and (3) modified Section 4.3 to extend the Testing Period, allowing the QF Seller additional time to complete testing in the event of a final permitting delay caused by the Duke Companies and not the QF Seller's acts or omissions. 149 Witness Johnson highlighted two limited modifications changes to the Large QF PPA in his Stipulation testimony as agreed upon by the Stipulating Parties: (1) to clarify certain actions that a QF Seller may take under the Large QF PPA without triggering a change of control, the Duke Companies further amended the definition of "change of control" in Section 1.13 and added a new Section 1.17 to define a "Permitted Transfer";

<sup>&</sup>lt;sup>146</sup> Tr. Vol. 1, p. 83.14, lines 2-3; line 14.

<sup>&</sup>lt;sup>147</sup> Tr. Vol. 1, p. 79, lines 12-15, p. 83.15, lines 19-20.

<sup>&</sup>lt;sup>148</sup> Tr. Vol. 1, p. 83.15, lines 21-23.

<sup>&</sup>lt;sup>149</sup> Tr. Vol. 1, p. 83.16, lines 1–6.

and (2) in Section 1.15, the Duke Companies made wording corrections to the terms "upgrade" and "Requested Interconnection Facilities In-Service Date."<sup>150</sup>

Witness Johnson also noted that the Duke Companies have committed to reviewing the Large QF PPA with stakeholders in conjunction with the implementation of the Duke Companies' new interconnection process known as "queue reform." Witness Johnson stated that the Duke Companies anticipate undertaking this stakeholder review following FERC's ruling on the Duke Companies' queue reform application. Witness Johnson also explained that the Duke Companies' "queue reform" application is currently pending at FERC and that upon a determination, the Duke Companies will begin discussing any necessary changes to the Large QF PPA with stakeholders.

On behalf of ORS, Witness Horii stated that ORS does not object to the Duke Companies' proposed modifications to the Large QF PPA,<sup>153</sup> and no other intervenor proffered testimony regarding the Duke Companies' Large QF PPA. As Witness Johnson explained, the Stipulating Parties support the proposed minor revisions to the Large QF PPA and jointly recommend the Commission approve the Large QF PPA.<sup>154</sup>

In its Report, London Economics found that the Large QF PPA "remains compliant with the contractual provisions required under Act No. 62"<sup>155</sup> and "continues to be commercially reasonable."<sup>156</sup> In its view, London Economics further stated that the limited

<sup>&</sup>lt;sup>150</sup> Tr. Vol. 1, p. 86.7, lines 4-15.

<sup>&</sup>lt;sup>151</sup> Tr. Vol. 1, p. 83.16.

<sup>152</sup> Id

<sup>&</sup>lt;sup>153</sup> Tr. Vol. 1, p. 106.17.

<sup>&</sup>lt;sup>154</sup> Tr. Vol. 1, pp. 87.3-87.7.

<sup>155</sup> Hearing Exhibit 7 (LEI Report), p. 42.

<sup>156</sup> Id.

proposed changes to the Large QF PPA "all act to increase flexibility for QFs[,]... do not make fulfillment of the contract more onerous on the part of the QFs, and indeed were requested by them, and thus should be approved by the Commission as proposed in the Stipulation." <sup>157</sup>

## h. Large QF Tariff

The evidence supporting the findings of fact conclusions related to the Large QF Tariff is contained in the Duke Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding.

Witness Johnson explained that Commission Order No. 2020-315(A) directed the Duke Companies to prepare and file a tariff for Large QFs that is similar in structure to the Standard Offer Tariff. Consistent with this requirement, Witness Johnson explained that the Duke Companies each developed a Large QF Tariff presenting the current avoided cost rates available to Large QFs and initially filed the Large QF Tariffs with the Commission on May 15, 2020. Order No. 2020-315(A) further directed DEC and DEP to "incorporate the most up-to-date inputs to the avoided energy and avoided capacity rates to reflect future changes to Duke's integrated resource plans consistent with DEC's and DEP's most recently-filed IRPs in calculating the avoided cost rates for Large QFs." Accordingly, Witness Johnson explained that DEC and DEP have, since the initial May 2020 filing, updated their respective Large QF Tariffs on a quarterly basis through a filing

<sup>157 11</sup> 

<sup>&</sup>lt;sup>158</sup> Tr. Vol. 1, pp. 83.17-83.18.

<sup>15914</sup> 

<sup>&</sup>lt;sup>160</sup> Tr. Vol. 1, p. 83.18, lines 2-5

on the Commission's E-tariff system.<sup>161</sup> Witness Johnson explained that the Large QF Tariffs filed for approval with the Duke Companies Joint Application includes only minimal, non-substantive revisions to the Large QF Tariffs as filed in May 2020, and that the Large QF Tariffs comply with the Commission's Order Nos. 2019-881(A) and 2020-315(A).<sup>162</sup> Witness Snider testified that the Large QF Tariffs were calculated using the same methodology to calculate avoided energy and avoided capacity rates as the Duke Companies use to calculate the Standard Offer Tariff.<sup>163</sup>

On behalf of ORS, Witness Horii stated that ORS does not object to the Duke Companies' proposed modifications to the Large QF Tariffs, <sup>164</sup> and no other intervenor offered testimony regarding the Duke Companies' Large QF Tariffs. As Witness Johnson explained, the Stipulating Parties agree with the proposed minor revisions and jointly recommend the Commission approve the Duke Companies' Large QF Tariffs. <sup>165</sup> London Economics likewise recommended that the Commission approve the Duke Companies' Large QF Tariffs. <sup>166</sup>

### i. Notice of Commitment Form

The evidence supporting the findings of fact and conclusions of law related to the Notice of Commitment Form are contained in the Duke Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding. Witness Johnson explained that the Duke Companies' Notice of Commitment

<sup>&</sup>lt;sup>161</sup> Tr. Vol. 1, p. 83.18, lines 15-16.

<sup>&</sup>lt;sup>162</sup> Tr. Vol. 1, p. 83.18.

<sup>&</sup>lt;sup>163</sup> Tr. Vol. 1, p. 40.5, lines 12-16.

<sup>&</sup>lt;sup>164</sup> Tr. Vol. 1, p. 106.17, lines 12-19.

<sup>&</sup>lt;sup>165</sup> Tr. Vol. 1, p. 87.5, lines 1-9.

<sup>166</sup> Hearing, Exhibit 7 (LEI Report), at 50.

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Form is a document that small power producer QFs may execute to establish a non-contractual "legally enforceable obligation" to sell output of their QF facility to DEC or DEP.<sup>167</sup>

According to Witness Johnson, Act 62 directs the Commission to approve a notice of commitment to sell form whereby a small power producer may commit to sell its output (a) at the avoided cost rates, and (b) pursuant to the PPA terms in effect at the time it submits the Form to the utility. 168 While Act 62 does not specify each element of the Form required to establish the QF's "commitment to sell," it makes clear that the Form must provide small QFs a "reasonable period of time" from submittal of the Form to execute a PPA with the utility.<sup>169</sup> Witness Johnson explained that the Commission approved the Duke Companies' Notice of Commitment Form in the 2019 avoided cost proceeding. <sup>170</sup> Johnson also stated that the 2019 Notice of Commitment Form creates a legally enforceable obligation (LEO): "It is my understanding that the South Carolina legislature intended this Notice of Commitment Form to serve as the 'non-contractual LEO' ...." <sup>171</sup> He noted that the Duke Companies have been using the Notice of Commitment Form approved by the Commission in Order No. 2019-881(A) since that time and have not proposed any substantive modifications to the Form in this proceeding. 172 Rather, Witness Johnson explained that the only change to the Notice of Commitment Form proposed by DEC and DEP in this proceeding is to remove the option to submit the Form by mail and to require

<sup>&</sup>lt;sup>167</sup> Tr. Vol. 1, 83.19, lines 7-10.

<sup>&</sup>lt;sup>168</sup> Tr. Vol. 1, p. 83.19, line 11 – p. 83.20, line 3.

<sup>&</sup>lt;sup>169</sup> Tr. Vol. 1, p. 83.19, lines 21-23...

<sup>&</sup>lt;sup>170</sup> Tr. Vol. 1, p. 83.21, lines 11–21.

<sup>&</sup>lt;sup>171</sup> Tr. Vol. 1, p. 83.21, lines 8-10..

<sup>&</sup>lt;sup>172</sup> Tr. Vol. 1, 83.21.

QFs to email the Form.<sup>173</sup> Witness Johnson noted that all documents are now submitted by email, and the need for this change became especially apparent during the Covid-19 pandemic.<sup>174</sup>

Witness Johnson explained that the Duke Companies committed to negotiate in good faith with CCEBA on revisions to the Notice of Commitment Form and, in particular, the standard for establishing a Legally Enforceable Obligation as reflected on the Form in light of changes to the South Carolina Generator Interconnection Procedures (SCGIP) approved by the Commission in Order No. 2021-439 on June 18, 2021. As part of the Stipulation, the Duke Companies and CCEBA also agreed to submit proposed revisions to the Notice of Commitment Form to the Commission for approval after FERC approval of the revised SCGIP procedures.

Further, Witness Johnson testified that if FERC approves the requested complementary revisions to the Duke Companies' Joint Open Access Transmission Tariff, CCEBA and the Duke Companies agree to submit proposed revisions to the Notice of Commitment Form, jointly or separately, to the Commission for approval no later than two weeks after such approval. Witness Johnson clarified in his testimony that the timeframe may be extended by the mutual consent of CCEBA and the Duke Companies. 178

<sup>&</sup>lt;sup>173</sup> Tr. Vol. 1, p. 83.21, lines 19-20.

<sup>&</sup>lt;sup>174</sup> Tr. Vol. 1, p. 83.21.

<sup>&</sup>lt;sup>175</sup> Tr. Vol. 1, pp. 87.6–87.7.

<sup>&</sup>lt;sup>176</sup> Tr. Vol. 1, p. 87.7, lines 2-9.

<sup>&</sup>lt;sup>177</sup> Tr. Vol. 1, p. 87.7, lines 14-20.

<sup>&</sup>lt;sup>178</sup> Tr. Vol. 1, p. 87.7, lines 7-9.

On behalf of ORS, Witness Horii confirmed that ORS does not object to the Duke Companies' proposed Notice of Commitment Form. He noted that the proposed language changes are "very minimal," and the Form remains "consistent with" the Form approved by the Commission in Order No. 2019-881(A). No other intervenor submitted testimony regarding the Duke Companies' Notice of Commitment Form. As Witness Johnson testified, however, the Stipulating Parties recommend that the Commission approve the Notice of Commitment Form.

In its Report, London Economics noted that the "Companies have not proposed any material changes to the Notice of Commitment form in the current application." <sup>182</sup> Moreover, London Economics found reasonable the new requirement to deliver the Form via email rather than physical mail. <sup>183</sup> Given the limited update to the Form since the 2019 Commission-approved document, London Economics recommended that the Commission approve the revised Notice of Commitment Form as proposed by the Duke Companies. <sup>184</sup>

### V. FINDINGS OF FACT

After review of all of the evidence, including the testimony and exhibits of the witnesses and the Stipulation Agreement submitted by the parties, the Commission makes the following findings of fact:

1. The peaker methodology proposed in the Joint Application and as utilized by DEC and DEP, which is agreed to by the signatory parties in the Stipulation, is a

<sup>&</sup>lt;sup>179</sup> Tr. Vol. 1, p. 106.17, lines 12-19.

<sup>&</sup>lt;sup>180</sup> *Id*.

<sup>&</sup>lt;sup>181</sup> Tr. Vol. 1, p. 87.4, lines 18-22.

<sup>182</sup> Hearing Exhibit 7 (LEI Report), p. 17.

<sup>183</sup> Hearing Exhibt 7 (LEI Report), p. 44.

<sup>&</sup>lt;sup>184</sup> Id.

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reasonable and appropriate methodology to quantify DEC's and DEP's forecasted capacity and energy cost to be avoided by purchases from QFs.

- 2. DEC and DEP have identified an avoidable capacity need, as presented in the utilities' 2020 Integrated Resource Plans (IRP) and as agreed to in the Stipulation.
- 3. In light of the Stipulation reached between the parties, the performance adjustment factor (PAF) capacity payment multipliers of 1.07 for DEC and of 1.08 for DEP are accepted by the Commission as reasonable at this time.
- 4. In light of the Stipulation reached between the parties, the seasonal allocation weightings of 95% for winter and 5% for summer for DEC, and 100% for winter for DEP, as agreed to in the Stipulation, is reasonable and should be used in calculating DEC's and DEP's avoided capacity rates in this proceeding.
- 5. The Duke Companies' modeling methodology and input assumptions used to calculate DEC's and DEP's avoided energy cost rates and avoided capacity cost rates as agreed to in the Stipulation are reasonable.
- 6. We accept the avoided energy costs and avoided capacity costs calculations by DEC and DEP as agreed to in the Stipulation in this proceeding as reasonable.
- 7. We accept DEC's and DEP's proposed avoided energy rate design as agreed to in the Stipulation establishing avoided cost rates that appropriately compensate QFs for the value of the energy provided to the Duke Companies and customers, consistent with PURPA, FERC's implementing regulations, and Act 62.

- 8. As part of the Stipulation, it is reasonable for DEC and DEP to recover intra-hour ancillary services cost from the solar generators that are driving the cost through
- the Solar Integration Services Charge ("SISC").

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- 9. Continuation of the SISC of \$1.10/MWh for DEC and \$2.39/MWh for DEP as agreed to in the Stipulation, is reasonable.
- 10. It is reasonable for DEC and DEP to continue filing updates of the SISCs with the Commission in 2022 after completing the independent technical review as agreed to in the Stipulation.
- 11. It is reasonable for DEC and DEP to update the Large QF Tariffs in a manner consistent with Order Nos. 2019-881(A) and 2020-315(A).
- 12. The Duke Companies' Standard Offer Tariff, Standard Offer PPA and Standard Offer Terms and Conditions, as agreed to in the Stipulation, are commercially reasonable and should be approved for small power producer QFs up to 2 MW.
- 13. The Duke Companies' Large QF PPA, as modified and agreed to in the Stipulation, is commercially reasonable and should be the approved form of PPA for small power producer QFs larger than 2 MW that do not qualify for the Standard Offer (Large QFs).
- 14. The Duke Companies' Large QF Tariffs, as agreed to in the Stipulation, are commercially reasonable and should be approved for Large QFs.
- 15. It is reasonable for DEC and DEP to continue updating on a quarterly basis their respective Large QF Tariff avoided cost rates using the most up-to-date inputs under

the approved peaker methodology and to file those Large QF Tariff updates with the Commission.

- 16. We find that the proposed Notice of Commitment Form submitted by the Duke Companies is reasonable.
- 17. On July 23, 2021, prior to the scheduled hearing, a Stipulation of Agreement between DEC and DEP, ORS, CCEBA, SCCCL and SACE was filed with the Commission. All parties of record were signatories to this Stipulation except for Johnson Development Associates, Inc. and the South Carolina Department of Consumer Affairs. Johnson Development Associates, Inc. did not object to the Stipulation. The South Carolina Department of Consumer Affairs informed the Commission in writing that it did not object to the Stipulation.
- 18. Pursuant to the Stipulation, the Stipulating Parties agree to and recommend the following:
  - (1) approval of the Duke Companies' proposed avoided cost methodology and calculation of avoided energy and avoided capacity rates;
  - that DEC/DEP continue to update the Large QF Tariffs in a manner consistent with Order Nos. 2019-881(A) and 2020-315(A), as well as continue to provide updates to this Commission regarding the progress on revisions to the Solar Integration Service Charges (SISC);

- (3) that DEC/DEP continue to provide detailed information regarding updated inputs on request to QFs that are negotiating a PPA with DEC or DEP, and to also provide such information upon request to CCEBA, as provided by Order No. 2020-315(A);
- (4) that any Party can bring before the Commission any dispute regarding the application of the Duke Companies' Integrated Resource Plans to the Large QF Tariffs;
- (5) that DEC/DEP's avoided energy rate structure includes differentiation of Summer, Winter and Shoulder seasons. For DEC, the rate design reflects ten (10) energy pricing periods, and for DEP, the rate design reflects nine (9) energy pricing periods. Each pricing period reflects the energy value of QF generation during the different time periods;
- (6) that DEC/DEP's Standard Offer PPA, in conjunction with Schedule PP and the updated supporting Terms and Conditions, offer eligible QFs a term duration of ten years; and
- (7) that DEC/DEP's Solar Integration Services Charge remain the same.
- 19. The Commission finds that the Stipulation of Agreement meets the requirements of S.C. Code Ann. § 58-41-20.

20. The Commission approves and adopts the Stipulation of Agreement in this proceeding as just and commercially reasonable and consistent with the requirements of PURPA and South Carolina Act 62 of 2019.

## VI. CONCLUSIONS OF LAW

- 1. The Commission opened a docket to review the avoided cost methodologies, standard offers, form contracts, and commitment to sell forms of Duke Energy Carolinas and Duke Energy Progress as required by Section 58-41-20 of the South Carolina Code of Laws (Supp. 2020).
- 2. Act 62 directs the Commission to review and approve the methodology that the Duke Companies use to establish avoided energy and capacity cost rates offered to QFs—including both smaller QFs eligible for the Standard Offer as well as Large QFs—to ensure that the utility fully, accurately, and fairly accounts for costs avoided or incurred by the Duke Companies, "including, but not limited to, energy, capacity, and ancillary services provided by or consumed by small power producers[.]" *See* S.C. Code Ann. §§ 58-41-20(A), 58-41-20(B)(1), (3).
- 3. Taking into consideration the evidence presented, the general agreement among the parties and the findings of the London Economics Report, the Commission concludes that the Duke Companies' application of the peaker methodology is reasonable and appropriate for purposes of quantifying DEC's and DEP's forecasted capacity and energy cost to be avoided by purchases from QFs and is consistent with the requirements of Act 62 and PURPA.

- 4. As part of the Commission's responsibility under Act 62 to approve the Duke Companies' avoided cost methodology, the Commission must also ensure that "rates for the purchase of energy and capacity reflect the electrical utility's avoided costs" including the utility's capacity costs to be avoided by purchases from QFs. S.C. Code Ann. § 58-41-20(B)(1), (3).
- 5. Taking into consideration the evidence presented, the general agreement among the parties and the Report and testimony of the Commission's independent third-party consultant, the Commission concludes that the Duke Companies' avoided capacity quantification and rate design, as agreed to in the Stipulation, reflects their respective avoided capacity costs. Consistent with this evidence, the Commission concludes that (1) the Duke Companies identified their avoidable capacity need as presented in their respective 2020 IRPs; (2) it was reasonable for the Duke Companies to use their "peaker" cost methodology to quantify the projected capacity value avoided by QF purchases; (3) the PAF multipliers of 1.07 for DEC and 1.08 for DEP, which were agreed upon as part of the Stipulation, are reasonable at this time; and (4) the seasonal allocation weightings of 95% (winter) and 5% (summer) for DEC and 100% (winter) for DEP which were agreed upon as part of the Stipulation are reasonable for use in calculating the Duke Companies' respective avoided capacity rates in this proceeding.
- 6. Accordingly, the Commission concludes that the avoided capacity quantification and rate design, as agreed to in the Stipulation, is a reasonable and appropriate methodology to quantify DEC's and DEP's forecasted capacity and energy

cost to be avoided by purchases from QFs and is consistent with the requirements of Act 62 and PURPA.

- 7. Taking into consideration the evidence presented, the general agreement among the parties and the Report and testimony of the Commission's independent third-party consultant, the Commission concludes that the Duke Companies' avoided energy calculation and rate design, as agreed to in the Stipulation, reflects their respective avoided energy costs and that the rates appropriately compensate QFs for the value of energy provided to the Duke Companies and its customers, in a fair and nondiscriminatory manner consistent with PURPA.
- 8. Consistent with this evidence, the Commission specifically concludes that the Duke Companies' proposed seasonal and hourly pricing periods, as agreed upon in the Stipulation, are reasonable, consistent with the Commission's findings in Order No. 2019-881(A), and compensate QFs for the avoided energy value they create for customers.
- 9. The Commission concludes that the avoided energy calculation and rate design, as agreed to in the Stipulation, quantifies DEC's and DEP's forecasted energy cost to be avoided by purchases from QFs and is consistent with the requirements of Act 62 and PURPA.
- 10. The Commission concludes that DEC and DEP shall continue to charge the SISCs under the same terms approved by Order No. 2019-881(A) until such time as updated SISCs are filed for approval by the Commission. The Duke Companies shall complete the independent technical review ordered by the Commission in Order No. 2019-

881(A), shall file updated SISCs in 2022, and also file any supporting studies on or before August 1, 2022.

- 11. The Commission adopts the Standard Offer Tariffs proposed by the Duke Companies in Johnson Stipulation Exhibit 2 (DEC) and Johnson DEP Exhibit 2 (DEP). Likewise, the Commission adopts the Standard Offer PPAs and Terms and Conditions proposed by the Duke Companies in Johnson DEC Exhibits 3 & 4 and Johnson DEP Exhibits 3 & 4.186
- 12. Act 62 requires DEC and DEP to offer fixed price PPAs to small power producers for the purchase of energy and capacity at avoided cost rates, with "commercially reasonable terms and a duration of ten years" until certain thresholds have been met. S.C. Code Ann. § 58-41-20(F)(1). Similarly, Act 62 mandates that terms and conditions be "commercially reasonable" and consistent with all FERC regulations and orders issued to implement PURPA. S.C. Code Ann. § 58-41-20(B)(2).
- 13. The Commission is persuaded by the testimony of Witness Johnson on behalf of the Duke Companies, Witness Horii on behalf of ORS, and Witness Goulding on behalf of the Commission's independent third-party consultant London Economics that the Duke Companies' Standard Offer documents are commercially reasonable and consistent with the requirements of PURPA, FERC's implementing regulations, and Act 62.
- 14. The Commission adopts the Large QF PPA proposed by the Duke Companies in Johnson Stipulation Exhibit 6.<sup>187</sup>

<sup>185</sup> Hearing Exhibits 5 & 4.

<sup>186</sup> Hearing Exhibits 3 & 5.

<sup>&</sup>lt;sup>187</sup> Hearing Exhibit 5.

- 15. The Commission concludes that the Large QF PPA proposed by Witness Johnson satisfies necessary contractual requirements, while remaining commercially reasonable and consistent with PURPA and FERC's implementing regulations. The Commission further concludes that the Duke Companies and Large QFs may mutually agree to contract using PPAs that contain different terms than those contained in the Large QF PPA adopted by the Commission.
- 16. The Commission adopts the Duke Companies' respective Large QF Tariffs presented in Johnson Stipulation Exhibit 4 (DEC) and Johnson DEP Exhibit 6.<sup>188</sup>
- 17. The Commission concludes that the Duke Companies' proposed Large QF Tariffs comply with the requirements of Order No. 2020-315(A) to prepare a tariff applicable to QFs not eligible for the standard offer and to update such tariff on a quarterly basis.
- 18. The Commission concludes that the Duke Companies' proposed Notice of Commitment Form is reasonable and complies with the requirements of FERC's implementing regulations, PURPA, Act 62, and all other applicable rules and regulations.
- 19. The Commission concludes that the Stipulation of Agreement meets the criteria of S.C. Code Ann. § 58-41-20.

### VII. ORDERING PROVISIONS

## IT IS THEREFORE ORDERED:

1. Based upon the Joint Application, Stipulation of Agreement, Third-Party Consultant's Report of London Economics, the testimony, and exhibits received into

<sup>188</sup> Hearing Exhibits 3 & 5.

evidence at the hearing and the entire record of these proceedings, the Commission hereby adopts each and every finding of fact enumerated herein. The Commission's conclusions of law are fully stated above.

- 2. Any motions not expressly ruled upon herein are denied.
- 3. The avoided capacity and energy costs for DEC approved in this proceeding are:

		Intere	Interconnected to Distribution			Interconnected to Transmission		
		Variable Rate	Fixed Long- Term Rate (5 years)	Fixed Long- Term Rate (10 years)	Variable Rate	Fixed Long- Term Rate (5 years)	Fixed Long- Term Rate (10 years)	
<u>Inergy</u>	Credits (c/kWh)2:							
)n-peal	k kWh;							
a.	Summer	3.01	3.03	3.20	2.87	2.89	3.06	
b.	Winter		2 2	X	2			
	1. Morning Hours	3.50	3.42	3.90	3.41	3.33	3.80	
	2. Evening Hours	3.18	3.34	3.79	3.10	3.25	3.69	
c.	Premium Peak							
	1. Summer	3.01	3,06	3.19	2.90	2.94	3.08	
	2. Winter	4.78	4.52	4.72	4.63	4.38	4.57	
d,	Shoulder							
	1. Morning/Evening Hours	3.18	3.17	3.21	3.12	3.11	3.15	
	2. Midday Hours	2.62	2.73	2.76	2.57	2,68	2.71	
lff-pea	k kWh;							
u.	Summer	2,16	2.22	2.31	2.12	2,18	2.27	
b.	Winter	3.08	3.02	3.25	3,02	2.96	3,18	
c.	Shoulder	2.38	2.25	2.33	2.35	2.22	2,30	

On-peak kWh:

a. Summer

b. Winter

0.00	0.30	0.93	0.00	0.30	0.90
0.00	2.37	7.21	0.00	2.30	7.02

4. The avoided capacity and energy costs for DEP approved in this proceeding are:

	Interco	Interconnected to Distribution		Interconnected to Transmission		
	<u>Variable</u> <u>Rate</u>	Fixed Long- Term Rate (5 years)	Fixed Long- Term Rate (10 years)	Variable Rate	Fixed Long- Term Rate (5 years)	Fixed Long- Term Rate (10 years)
Energy Credits (é/kWh)2						
On-peak kWh:						
a. Summer	2.94	2.96	3.00	2.86	2.88	2.92
b. Winter						
1. Morning Hou	ars 3.75	3.61	3.92	3.68	3.54	3.84
2. Evening Hou	rs 3.65	3.76	4.27	3.57	3.68	4.18
c. Premium Peak						
1. Summer	3.30	3.16	3.22	3.21	3.07	3:12
2. Winter	5.19	4.82	5:12	5.04	4.68	4.98
d. Shoulder	3.03	3.04	3.04	2.99	3.00	3.00
Off-peak kWh:						
a. Summer	2.68	2.75	2.83	2.64	2.71	2.78
b. Winter	3.05	3.18	3.49	3.00	3.13	3.44
c. Shoulder	2.62	2.58	2.61	2.59	2.55	2.58
Capacity Credits (c/kWh)	J:					
On-peak kWh:						
a. Winter	0.00	7.58	10.29	0.00	7.43	10.08

- 5. Within fifiteen (15) days of the date of this Order, DEC and DEP shall each file final Standard Offer Tariffs, Standard Offer PPAs, and Standard Offer Terms and Conditions, form contract power purchase agreements for Large QFs, Large QF Tariffs and Notice of Commitment to Sell Forms consistent with the requirements of this Order.
- 6. The Standard Offer Tariffs shall become effective on the date this Application was filed in this Docket, which is April 22, 2021, and shall remain in effect until the date that the Duke Companies next file updated avoided cost rates with the Commission.

- 7. The Large QF Tariffs shall become effective on the date this Application was filed in this Docket, which is April 22, 2021, and the Duke Companies shall update their inputs for both avoided energy and avoided capacity costs on a quarterly basis based upon each Company's most current integrated resource planning assumptions and forecasts when calculating avoided energy and capacity cost rates available to Large QFs and file updated Large QF Tariffs with the Commission via the Commission's e-tariff system.
- 8. DEC and DEP shall file the results of the Solar Integration Services Charge (SISC) independent technical review as well as updated Solar Integration Services Charges on or before August 1, 2022.
- 9. This Order shall remain in full force and effect until further Order of the Commission.

# BY ORDER OF THE COMMISSION:



Justia T. Williams, Chairman Prolic Service Commission of South Carolina